

I also examined slightly a saddle further east, leading apparently into the same river on the Canterbury side; but heavy rain and fog prevented further work that day, and, as my instructions only applied to the former saddle, and having for some time past shared with others a strong opinion in favour of a saddle at the head of the Copland River, slightly west of the Footstool, from previous knowledge of the main range, it did not appear worth while to spend more time over this route, so we at once returned up the river. From McKenzie's Creek up the Landsborough and into the Karangaroa there is no real difficulty for a track, which should be taken up the south side to just above the Fettes Glacier, which pushes its way right into the river, and here carry the track across by a bridge to the north bank, and so on to the saddle into the Karangaroa. The two points to be examined by expert road engineers are, I think, Broderick's Pass and the rise out of Cassell's Flat, neither of which ought to be found insuperable, though no doubt the former will be a source of great expense. Another point, by the way, which will add to the expense is the number of creeks to be bridged on the way down the Landsborough River.

After spending four or five days in the basin at the head of the Twain River, into which we went *via* a saddle some little way up the McKerrow Glacier, we returned into the Karangaroa River, and, completing the survey and exploration of that valley, reached Mr. Scott's house, on the flats, at the end of the first week in February.

Before speaking of the Copland River, mention ought to be made of the wonderfully grand scenery in the Twain River, equalling, if not surpassing, anything I have seen in Europe or elsewhere. Mount Sefton, the grandest peak we have in the opinion of many, is the principal object in the valley, sending down the magnificent ice-field of the Douglas Glacier, which is perhaps the finest example existing of a glacier with its *névé* entirely unconnected with its trunk. For upwards of four miles the ice-field lies on a sloping rock-bed separated entirely from the trunk of the glacier by sheer rock precipices, which run nearly its whole length, varying in height from 200ft. to 1,500ft., over which between twenty and twenty-five avalanches an hour fell during the night we were bivouacking near it, a fact which made the Maori regret that he had ever come into such outlandish places. The ice thus avalanching has filled the floor of the valley, and formed a glacier of nearly five miles in length, covered with a heavy surface moraine. The other side of the valley has precipices rising in sheer faces, interrupted by ledges and terraces, to a height of over 2,000ft., which continue right down the valley on the left-hand side and form the eastern bank of the gorge. Slightly over a mile and half below the snout of the Douglas Glacier another fine glacier comes in from the north, which, unlike most of our New Zealand glaciers, is quite clean and free from surface moraine. This I have named after Mr. Horace Walker, late president of the Alpine Club, London; while on the smaller glacier, lying above the Douglas, I have placed Mr. FitzGerald's name, who has been doing such good work this year in our alps, with the help of that grand guide Mattia Zurbriggen.

A mile or more below the junction of the Horace Walker Stream the Twain River descends rapidly through a very narrow and deep gorge of some 20 chains in length, which I had not time to inspect closely; but from point H it appeared to me that the river had encountered a bar of rock, and cut a narrow black-looking gut of some 200ft. or more in depth at the lower end, while at the upper end it has been able only to wear away a shallow channel, which gradually deepens as it approaches the lower outlet. The breadth of this gorge cannot be many feet.

The scenery of the Karangaroa River is fine also, and, though probably equalling anything and surpassing most things yet open to tourists, does not come up to the Twain River. Amongst other features, there are above the cataracts two peculiar gorges, not of any great size, but certainly interesting. The first one met with in going up the valley is a narrow-cut channel, varying from 3ft. to 15ft. in breadth, and about 30ft. deep, cut into very fantastic shapes by the action of the water. The other is above Camp 5, and in one place is 20 yards broad at the water's edge, while 40ft. above the river the sides overhang and approach to within about 6ft.—the gap being easy to cross; while 2 chains above this point the sides touch one another for 15ft. above the water, the river bubbling up through a channel evidently some feet under the surface, into which it descends with a small whirlpool.

No difficulty would be found in the way of a track into the head of the Twain *via* the gorge, as the country is very solid, and the gradients could be made easy. But though we have peaks as grand in appearance as, and presenting more difficulties than, Mount Cook, I fear that it will be many years before any district will attract attention from tourists or others unless it goes by that most comprehensive of names, Mount Cook, which seems to be applied generally to districts widely separated from each other, and having no connection whatever with that peak, provided there is a certain amount of perpetual snow and ice. And to term any locality on the West Coast Mount Cook is incorrect, as it has long been known that this peak lies on the Canterbury side of the range, and could not possibly be reached from the West Coast.

Having finished the map of the Karangaroa and the necessary reports, I was starting up the Copland Valley with R. Fiddian to examine the saddle lying at the head of the eastern branch when we met Mr. FitzGerald coming down, having made the pass just a few days before we should have; indeed, had we started a week before we would have met them on the Hermitage side. Sending Fiddian up the river with a light camp and stores, I returned with the others to the Hermitage *via* another saddle, and on the 13th March left the Hermitage, alone, to reach the coast. There is no difficulty, from an alpine point of view, to one with any experience, in crossing this pass, even as it stands, but I would not recommend a party new to mountain-work to attempt it unless they had a guide to the top of the Hermitage side.

The descent into the Copland is about as easy as it could be down to the river, and the river is—for the West Coast—not at all bad to descend. As far as this route is concerned for a horse-track, I do not think it will be such a very easy matter to engineer it at present, as a greater part of the Hermitage side and some of the West Coast side will undoubtedly require a solid masonry-